

IN THE CLAIMS:

Amend claims 5, 15 and 21, and cancel claims 12, 16 and 21 without admission or disclaimer as shown in the following listing of claims, which replaces all previous listings and versions of claims.

1.-4. (canceled)

5. (currently amended) A vacuum pump which generates vacuum by sucking and discharging a gas, comprising:

a pump case for the vacuum pump;

a thread pump stator that supports the pump case;

a base that supports the thread pump stator;

a stator column formed integrally with the base;

a rotor arranged so as to cover the stator column;

rotating blades provided in multiple stages at the outer periphery of the rotor; and

a cooling water pipe buried in the wall of the stator column, one end of the cooling water pipe being branched into a plurality of water inlet ports and another end of the cooling water pipe being branched into a plurality of water outlet ports,

wherein each of the water inlet port and the water outlet port is branched into two branches and disposed in the base, one branch of the water inlet port and one branch of the water outlet ports being communicated with the outside of the vacuum pump at the side surface of the base, and the other branch

of the water inlet port and the other branch of the water outlet port being communicated with the outside of the vacuum pump at the bottom surface of the base.

6. (previously presented) A vacuum pump according to claim 5; wherein the pump case has a fastening portion which is fastened to the thread pump stator to support the pump case, and the thread pump stator has a flange which extends from the thread pump stator and fastens the pump case to support the pump case.

7. (previously presented) A vacuum pump according to claim 5; wherein an external casing of the vacuum pump is formed by the pump case, the thread pump stator, and the base.

8. (previously presented) A vacuum pump according to claim 5; wherein in the vacuum pump, the inner peripheral surface shape of the rotor and the outer peripheral surface shape of the stator column are different from each other.

9. (previously presented) A vacuum pump according to claim 5; further comprising a second cooling water pipe arranged on the outer surface of the thread pump stator.

10. (previously presented) A vacuum pump according to claim 5; further comprising a heater arranged on the outer surface of the thread pump stator.

11.-12. (canceled)

13. (previously presented) A vacuum pump according to claim 5; further comprising a plurality of joints which are fixed to each end of the cooling water pipe and buried in the vacuum pump flush with the external surface of the pump.

14. (previously presented) A vacuum pump according to claim 13; wherein the joints and the cooling water pipe are formed of the same metal.

15. (currently amended) A vacuum pump which generates vacuum by sucking and discharging a gas, comprising:

a pump case for the vacuum pump;

a base arranged below the pump case;

a thread pump stator arranged on the base;

a stator column formed integrally with the base;

a rotor arranged so as to cover the stator column;

rotating blades provided in multiple stages at the outer periphery of the rotor; and

a cooling water pipe buried in the wall of the stator column, one end of the cooling water pipe being branched into a plurality of water inlet ports and another end of the cooling water pipe being branched into a plurality of water outlet ports,

wherein each of the water inlet port and the water outlet port is branched into two branches and disposed in the

base, one branch of the water inlet port and one branch of the water outlet port being communicated with the outside of the vacuum pump at the side surface of the base, and the other branch of the water inlet port and the other branch of the water outlet port being communicated with the outside of the vacuum pump at the bottom surface of the base.

16. (canceled)

17. (previously presented) A vacuum pump according to claim 15; further comprising a heater arranged on the outer surface of the thread pump stator.

18. (previously presented) A vacuum pump according to claim 15; further comprising a plurality of joints which are fixed to each end of the cooling water pipe and buried in the vacuum pump flush with the external surface of the pump.

19. (previously presented) A vacuum pump according to claim 19; wherein the joints and the cooling water pipe are formed of the same metal.

20. (currently amended) A vacuum pump for evacuating gas from a chamber to create a vacuum in the chamber, the vacuum pump comprising:

a rotor;

an electrical equipment section that rotatably supports and rotationally drives the rotor;

a stator that has a thread pump section and that coacts with the rotor to evacuate gas from the chamber by suction in response to rotation of the rotor;

a stator column that is integral with the stator and that contains the electrical equipment section; and

a cooling water pipe buried in a wall of the stator column, the cooling water pipe having a water inlet end portion buried in the wall and a water outlet end portion buried in the wall, the water inlet end portion branching into a plurality of water inlet ports and the water outlet end portion branching into a plurality of water outlet ports,

wherein one branched water inlet port and one branched water outlet port open to the outside of the vacuum pump at a side surface of the stator column, and another branched water inlet port and another branched water outlet port open to the outside of the vacuum pump at an underside of the stator column.

21. (canceled)

ADDITIONAL FEE:

No additional fee is believed required in connection with this response. However, should it be determined that a fee is due, authorization is hereby given to charge any such fee to our Deposit Account No. 01-0268.